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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,665	02/14/2002	Garrett Andrew Smith		2982

7590 08/27/2003
Garrett A. Smith
1365 Bishop Street
San Luis Obispo, CA 93401

EXAMINER

CHARLES, MARCUS

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/077,665

Applicant(s)

SMITH, GARRETT ANDREW

Examiner

Marcus Charles

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

This is the first action relating to serial application number 10/077,665, filed 02-12-2002.

Claims 1-12 are currently pending.

Drawings

1. The draftsman has approved the drawing filed with this application.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "the tool interface means of the bolt and nut having different sizes" and "the tool interface means of the nut faces outside the crank handle" as in claims 3, 6, 9 and 11, respectively, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 1-2, 4-5, 7-8, 10 and 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO(9308071) in view of Kirrish(4,310,273). WO(9308071) discloses a fastener assembly (107,109) for attaching a chainring to a bicycle, the device comprising a nut (107) comprising an internally threaded cylinder, an external flange

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(not labeled) on one end and a hole in the cylinder; a bolt (109) threadedly engages the nut and comprising a tool interface (not labeled) formed inside the shaft. WO(9308071) does not disclose a tool interface means formed inside the cylinder. Kirrish discloses a fastener system (20) comprising a nut (34) having a threaded cylinder (44) and a tool interface means (58) formed in the cylinder in order to facilitate proper alignment between the bolt and nut thus minimizing cross-threading before tightening the fastening device and to allow quick and easy removal without the bolt and nut turning in unison. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the fastening device of WO(9308071) so that the nut has a tool interface in the threaded cylinder in view of Kirrish in order to facilitate proper alignment between the bolt and nut thus minimizing cross-threading before tightening the fastening device and to allow quick release and by fastening/turning the bolt and nut simultaneously and to allow quick and easy removal without the bolt and nut turning in unison.

In claim 2, it is apparent that the tool interface (56, 58) are of the same size and shape.

In claim 10, not the tool interface of the nut faces the out side of the crank handle

5. Claims 3, 6 and 9 rejected under 35 U.S.C. 103(a) as being unpatentable over WO(9308071) in view of Kirrish. WO(9308071) and Kirrish do disclose that the tool interface means are different in size. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the fastening device of WO(9308071) in view of Kirrish so that the tool interfaces are of different size, since such a modification

would have been a matter of design choice, and such a modification would involve a mere change in weight and cost of manufacturing. A change in size is generally recognized as being within the level of ordinary skill in the art. In *Rose*, 105 USPQ 237 (CCPA 1955)

6. Claims 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO(9308071) in view of Kirrish. WO(9308071) in view of Kirrish do not disclose the nut toll inter face means faces the outside of the crank handle. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the fastening device of WO(9308071) so that the too interface means faces the outside of the crank handle, since this involves rearranging the nut and bolt to face a different direction and it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.


Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dzus (2,511,051), disclose a fastening device with a tool interfaces means inserting a tool. Conte (5,454,676) and Rebish (4,490,083) disclose a fastening device with a tool interface means on the nut and bolt. Edwards (5,766,106) and Yang (5,782,713) and JP(05-330,479) disclose a crankset assembly. Mohr(1,967,039) disclose a fastening device with a bolt threadedly engaged to a nut.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (703) 305-6877. The examiner can normally be reached on Monday -Thursday 7:30 am-600 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on (703) 308-3668. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.


Marcus Charles
Primary Examiner
Art Unit 3682
August 21, 2003